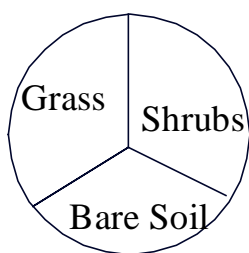




THE COVEY HEADQUARTERS

Volume 14 Issue 2 Summer 2015

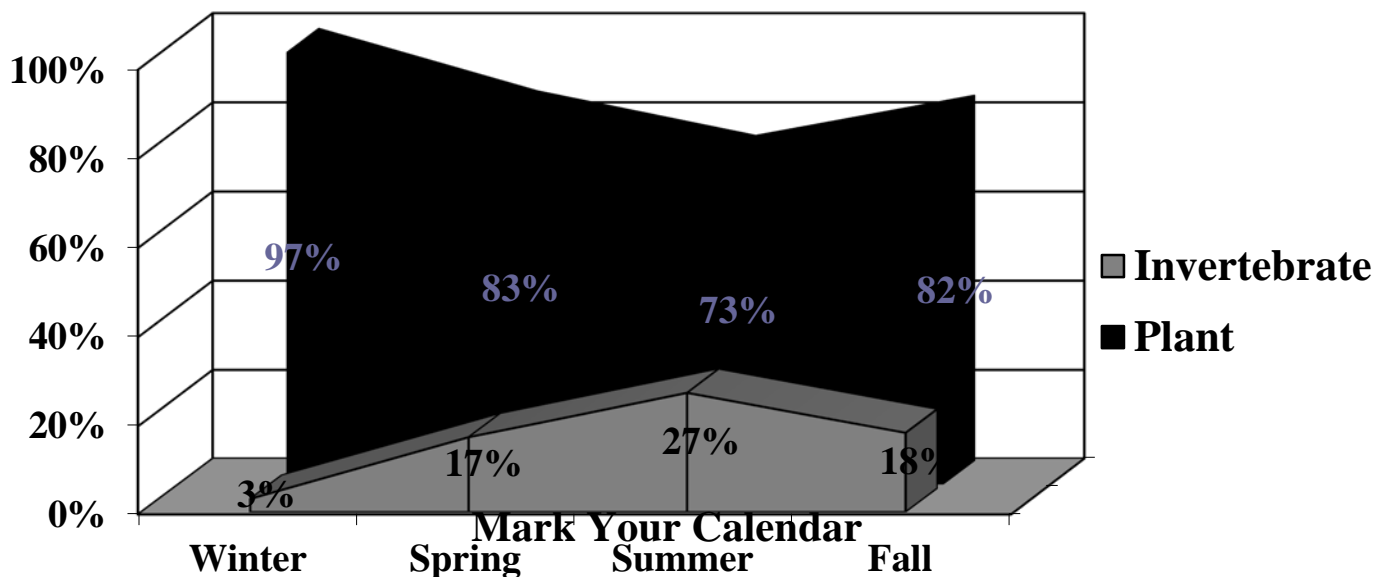
This newsletter is aimed at cooperators and sports-people in Missouri to provide information on restoring quail. This is a joint effort of the Missouri Department of Conservation, USDA-Natural Resources Conservation Service, and University of Missouri Extension. If you would like to be removed from this mailing list or have suggestions for future articles please contact jeff.powelson@mdc.mo.gov or 816-232-6555 x122 or write to the address shown.



The name of this newsletter is taken from an old concept.....that a quail covey operates from a headquarters (shrubby cover). If the rest of the covey's habitat needs are nearby, a covey should be present. We are encouraging landowners to manage their quail habitat according to this concept. Use **shrubs** as the cornerstone for your quail management efforts. Manage for a **diverse grass, broadleaf weed and legume mixture and provide bare ground** with row crops, food plots or light disking **right next to** the shrubby area.

Quail Food by Season

The graph below is a general representation of how quail diet changes through the season. Notice the heavy insect requirements in the summer. Quail chicks require 80-95% insects during their first few weeks of life. Commonly eaten insects include beetles, leafhoppers, spiders, grasshoppers, ants, crickets, stinkbugs, flies, and snails.



Summer Covey Headquarter Calendar

June

Complete breeding bird surveys this month.

Quail nesting peaks in June.

Seed milo, millet, and forage sorghum food plots by June 30.

Contact MDC or NRCS for burn plan assistance.

Mow newly planted native grass stands to a height of 6-8 inches for weed control.

July

Excessive June and July rains can shift peak quail hatching to August.

Quail continue to nest and broods are foraging – resist the temptation to mow this month.

August

Mow or burn fescue to prepare for fall herbicide treatment.

Till firebreaks now to prepare for fall, winter, and spring prescribed burns.

Burn native warm-season grasses now to stimulate wildflowers.

Identify Weedy Plants with the Help of Your Phone –

University of Missouri Extension has a weed ID website and App for iPhone and Android. The app is called ID Weeds and has detailed photos and information on more than 400 Missouri weeds. Use this new site to identify quail friendly weeds like ragweed, pigweed, lambsquarters, croton, and many others.

To download:

iPhone and other iOS devices: <https://itunes.apple.com/app/id-weeds/id559906313>

Android: <https://play.google.com/store>

A web version is available at weedID.missouri.edu and weedID.missouri.edu/mobile.

Mark Your Calendar

Livingston County Prescribed Burn Association - June 18 at 6:30PM at the Mildred B. Litton Classroom - Litton Ag Campus, Chillicothe, MO. Contact Andrew White at 660-619-1719 to register.

Prescribed Burn Workshop – August 11, Mineral Area College, 5270 Flat River Road, Park Hills. Two sessions, the first from 1-4:30PM and the second from 6-9:30PM. This workshop will include classroom discussions on methods, equipment, safety, and why and when you would use fire as a management tool. Emphasis will include how to conduct a safe and effective burn to control sprouts, encourage beneficial plants and create better quality quail habitat. Participation will qualify landowners to have a prescribed burn plan prepared for their fields and use available loan equipment. Register by contacting the Missouri Department of Conservation at 573-290-5730.

Use GovDelivery to get your copy of The Covey Headquarter Newsletter

The Missouri Department of Conservation (MDC) is upgrading their electronic subscription lists to better help you stay informed about conservation news you want. The new service, GovDelivery, will allow you to manage your subscriptions by topics and regional locations. Those of you that currently receive electronic updates from MDC have had your current subscriptions transferred to the new service.

You can review and update your subscriptions at <http://mdc.mo.gov/govdelivery>. You will need to enter your email address or mobile phone number to change or cancel your subscriptions. For those of you that receive the paper copy of the Covey Headquarters Newsletter and would like to get it electronically, visit the above website. By signing up for this new service, you will receive the quarterly newsletter as well as periodic updates on quail biology and management. Currently over 4,600 people are having their Covey Headquarter Newsletter delivered this way.

Using an ATV Sprayer for Habitat Improvements

Nick Prough, Chief Wildlife Biologist, Quail and Upland Wildlife Federation

As summer approaches us, many landowners are out preparing their properties for upcoming habitat work, whether that means converting some cool season grasses to native warm season grasses (NWSG) or prepping the ground for their annual food plot, a lot of habitat management spraying can be done with an ATV Sprayer and your ATV. These days many landowners have an ATV or access to one and getting a good quality ATV sprayer can greatly improve the variety and success of habitat management projects you can conduct on your property, even without having large equipment like a tractor. Below are a few tips on how to have the most success and efficiency while using your ATV sprayer this year.

Buy a good quality sprayer - one that is well built to last for many years - and has an adjustable pressure gauge. Select a sprayer with a good heavy duty handgun that won't bend or break after the first couple uses. A very common ATV sprayer size is a 25-gallon unit that, under normal conditions, allows you to spray up to 2 acres of land using the boom sprayer. This 25-gallon size sprayer also fits well when strapped down to most ATV back racks without overloading the ATV or becoming unstable. The sprayer can run directly off of the ATV battery utilizing the two-wire auxiliary plug on the back of the ATV, therefore eliminating the need for an additional battery to run the sprayer.

Follow the owner's manual of the specific sprayer you have for setting the actual pressure. Keep in mind that it may take some adjustments at first to get the correct pressure for the spray and coverage you want. Many sprayers with the booms out spray a good uniform pattern at about 20 to 30 PSI. If choosing to use the handgun for spot spraying, such as spraying invasive weeds or doing brush control in your grass stands, you may want to set the pressure a bit higher to about 50 to 60 PSI in order to reach longer distances and get better coverage for plants you are trying to spray. Selecting the proper speed with your ATV when spraying with the booms out is also something you will want to adjust depending on the roughness of the terrain and the pressure you selected to spray at, but an average speed of 5 to 7mph is a good common starting point.

Calibrating your sprayer is also very important once you have it set-up and mounted on your ATV to ensure proper coverage of the area you're wanting to spray. For further information on calibrating a sprayer, go to MDC's MO Landowner YouTube channel for a video on how this can be accomplished. After your sprayer has been calibrated, it's time to follow the label guidelines for the chemical you are mixing and start spraying the area you have selected to spray. While the booms are deployed, it is always best to overlap your coverage area by about 1 foot to make sure you don't miss any areas. There are also spray dyes available on the market that will help you know where you have sprayed and to keep you from missing too many areas or double spraying the same area multiple times, resulting in wasted herbicide and lost money. Spraying with an ATV sprayer, as with any sprayer, is best performed under lower wind conditions, thus avoiding overspray or missing targeted areas.

So as you can see, with just an ATV and a sprayer, you can get out this spring and conduct a wide variety of habitat management efforts to improve your land at a fraction of the cost of many larger sprayer units, as well as reaching those hard to access confined areas that many larger equipment sprayers can't get to.

Favoring Pollinators Favors Quail

The majority of pollinators in Missouri are insects such as native bees, honeybees, beetles, flies, moths, and butterflies. Through the process of foraging, both native and non-native pollinators provide pollinating services to roughly the entire suite of native flowering plants. Native flowering plants include forbs, legumes, shrubs, and trees.

Animals pollinate approximately 75 percent of the crop plants grown worldwide for food, fiber, beverages, condiments, spices, and medicines. It has been calculated that pollinators deliver one out of every three to four mouthfuls of the food we eat and beverages we drink.

Bobwhite quail and native pollinators share many of the same habitat needs and will use the same habitat-development practices. They both need bare ground and a diversity of plants, and they both benefit from the control of invasive species. In addition, they both use shrubs, native wildflowers, and bunch grasses. When we promote pollinator habitat we promote quail, too.



If you are interested in converting some marginal cropland to pollinator habitat consider enrolling in the Continuous Conservation Reserve Program. The pollinator practice (CP42) improves habitat for pollinators which in turn creates great brood habitat for quail. Contact the Farm Service Agency to see if you qualify for CP42. Applications for the program are taken on a continuous basis.

Did You Know???

Essential to its wellbeing, and one that it appears to enjoy, is the quail's habit of dusting. Dusting helps maintain quail feathers and reduces insect parasites. A depression, or dusting bowl, is scratched and pecked free of vegetation and the soil finely ground 3 or 4 inches deep. When dusting, quail immerse their breasts in the bowl and throw dust across their backs with their beaks and feet. Several birds will sometimes enter the bath together and shower one another with dust. During rainy periods, dust baths are sometimes located under the elevated portion of downed logs.

As long as there is some recent soil disturbance throughout the area, you need make no further effort to provide dusting sites. Cow paths, anthills, watering holes, roads, cropfields, and trails often provide these areas for quail. If there is no disturbance, disking can create the needed bare soil.

Quail Reproduction

The quail's reproductive capacity is large and their mating behaviors are impressive.

- The nesting season is long, lasting from April to October.
- Hens lay 12 to 18 eggs per nest.
- Chicks are precocial, being able to follow adults soon after hatching.
- Their breeding behavior is classified as both monogamous and polygamous, with the females sometimes leaving their mate and chicks to find another mate and start another nest.
- With the females being so promiscuous, males end up incubating about 25% of the nests.

All of the above behaviors allow one hen to produce up to 3 broods of 10 or so chicks per brood. The end result of this is a tremendous ability to rebound from high mortality during winter. Make sure you provide good nesting habitat on your farm. Nesting cover consists of grasses such as redtop, timothy, orchard grass, little bluestem, and broomsedge. There should be adequate litter from the previous year for the hen to build the nest.

Your nesting grass should also be located next to good brood rearing habitat. Brood rearing habitat consists of legumes and annual weeds with plenty of bare ground. This habitat is typically found in areas that have been left fallow one to two years after soil disturbance. A food plot that was left idle is a great example of brood habitat. The annual weeds that appear in an idled food plot provide an abundance of insects needed for rapid chick development and are often used by broods as feeding areas.



Don't Attach Your Mower!

Once the food plots or crops are in the ground and the hay harvested, many landowners can't stand being away from the machinery.....they get on a tractor and start mowing all of the odd areas on the farm that they can get to!! **THIS IS NOT A QUAIL-FRIENDLY PRACTICE.....**Studies have shown that quail populations are doubled when recreational mowing is avoided. We recommend you sell your mower and buy a disk or sprayer! Save the cover for quail nesting and brooding. Where quail are concerned a mower should only be used to control weed growth in new shrub or grass plantings. With the cool, wet weather we've had over much of the state in May, peak quail nesting and hatching will shift to July and August making it even more important to stay off the mower.



Bobwhite Quail Habitat Management Field Day

Bobwhite Quail Management in Modern Agriculture: Back to the Basics

Saturday June 27, 2015

8AM to Noon

MU Bradford Research Center, Columbia, Missouri

Designed for landowners, students, quail & native plant enthusiasts; Meet the experts and see exhibits; No fee and no reservations required for Field Day.

A silver carp (Asian carp) fish fry and processing demonstration at noon after the event with a completed evaluation!

- Bobwhite Quail 101, Basic Habitat Management Decisions With Optional Hands-on Tour
- Managing Your Farm For Ground Nesting Birds and Rabbits
- Wildlife Habitat Help Desk: Get a custom tailored wildlife plan for your property

SixAll New One Hour Wagon Tours Include:

- Managing Field Borders with Natives and Cover Crops for Quail and Pollinator Habitat
- Conducting Quail Whistle Counts and Habitat Management for Quail
- Prescribed Burns, Spray Options and Calibration, and Other Management Techniques
- Woodland Edge Habitat Management Techniques

Sponsored by:

**University of Missouri College of Food, Agriculture and Natural Resources
MU Extension
Missouri Department of Conservation
Missouri Soybean Association
USDA-NRCS
USDA-FSA**

Directions: From the junction of U.S. 63 and Hwy AC on the south edge of Columbia, go 5.5 miles east on New Haven Road, turn right (south) on Rangeline Road and go south for a mile to the Bradford Research Center entrance on the right. For alternative directions visit our web site at <http://aes.missouri.edu/Bradford>.

For More Information Contact:

Tim Reinbott: 573-884-7945, reinbott@missouri.edu

MDC expands pheasant hunting to statewide

Habitat is key for having wildlife to hunt, including game birds such as pheasants.

The Missouri Department of Conservation (MDC) has expanded pheasant hunting in Missouri from only the northern half of the state and a portion of the southeast to statewide starting with this year's fall hunting season.

The new regulations are listed in the Department's recently released *2015 Summary of Missouri Hunting and Trapping Regulations* booklet available at MDC offices, nature centers, other places where permits are sold, and online at mdc.mo.gov/node/3657.

Pheasant hunting starts with a youth-only weekend on Oct. 24-25 followed by the regular season of Nov. 1 through Jan. 15, 2016. Hunting remains limited to male pheasants only. The daily bag limit is two male birds and the possession limit is four. Valid permits are Daily Small Game Hunting, Small Game Hunting and Fishing, or Small Game Hunting.



Pheasant hunting in Missouri was previously limited to a North Zone consisting of all counties north of Interstate 70 and a portion of St. Charles County south of I70, and a Southeast Zone consisting of Dunklin, New Madrid, Pemiscot, and Stoddard counties.

According to MDC Resource Scientist Beth Emmerich, the expansion of pheasant hunting to statewide will simplify harvest rules for hunters across the state with minimal impact to the overall pheasant population.

"Hens are protected from harvest and one rooster often mates with multiple hens. Our rooster-only hunting season has very little impact on overall population size and growth," Emmerich said. "Habitat is what's key for developing and maintaining wildlife numbers, including game birds such as pheasants and quail. Pheasant populations improve with ample nesting and brood-rearing habitat, including open grassy and agricultural fields."

She noted that not all areas of the state have pheasants.

"There is noticeable variation in pheasant populations around the state with northwest Missouri and portions of the northeast holding the most birds," said Emmerich. "Many parts of the state do not have the type of habitat required to hold pheasants. Expansion of pheasant hunting to statewide does not imply that birds can be harvested or even observed in all areas of the state."

She added that other game species also have statewide hunting seasons regardless of not having significant populations in all parts of the state, including quail, swamp rabbit, and woodcock."

Bare ground is an essential element of good brood cover because a newly hatched quarter-ounce chick is very fragile. Thick vegetation, whether erect or lying on the ground, makes it impossible for chicks to travel or forage for seeds and insects.

The picture to the right was taken about 4 inches off the ground, or at a quail's eye view. The habitat provides good protection for quail and is easy for the birds to navigate through. This will reduce foraging time and the vulnerability of chicks and adults to predators and the elements. Walk your farm this summer and make sure you have areas that look like this. If you don't, conduct a prescribed burn or disk to provide bare ground and annual plants that will attract insects for quail.



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3915 Oakland Ave
St. Joseph, MO 64506

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